Montana Department of Transportation
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**Memorandum**

To: District Construction Engineers

From: Paul G. Jagoda, P.E., Construction Engineering Services Engineer

Tom S. Martin, P.E., Consultant Design Engineer

Date: January 26, 2007

Subject: Updated Procedure for Dealing with Construction Problems related to Design Errors or Omissions on Consultant Plans

## INTRODUCTION

Occasionally, a problem is encountered during the construction of a project as a result of errors and/or omissions from plans developed by Consultants. The costs incurred to remedy the situation can become significant. In the past, the Department has dealt with each instance in varying ways and with various results. This document will establish a statewide procedure to uniformly deal with errors and/or omissions from plans developed by Consultants.

## PURPOSE

The intent of this memo is to:

- Provide MDT field construction personnel with a procedure to quickly and efficiently obtain a solution to construction problems encountered as a result of errors and/or omissions from plans developed by Consultants
- Create a method to inform/involve various areas of the Department at logical times during the solution period
- Establish a uniform method to recuperate costs incurred by MDT as a result of errors and/or omissions on plans developed by Consultants

## DEFINITIONS

- **Errors** – incorrect data shown on the plans or supporting documentation
- **Omissions** – something neglected or not included with the plans or supporting

documentation

- **Corrective Actions** – to alter or adjust so as to bring to some standard or required condition
- **EPM** – MDT - Engineering Project Manager
- **CPE** – MDT - Consultant Project Engineer
- **CDE** – MDT - Consultant Design Engineer

## PROCEDURE

The Construction Engineering Services Bureau, the Consultant Design Bureau, and the District Construction Engineer should be contacted immediately by the Engineering Project Manager for assistance when these types of situations arise. This is particularly important if resolution is slow in developing and the delay could result in additional costs.

This procedure is intended to be an interactive and iterative process between the Field, the Consultant, and the Consultant Design Bureau. Communication between all parties should ensue throughout the procedure. Communication between the Department and the Consultant is aimed at providing a good faith attempt to reach an amicable solution however, such communication or lack thereof does not preclude the Department from implementation of any solution deemed appropriate.

The attached chart will provide the flow path for each step of the procedure. The following will provide additional information and clarification to the flow chart:

- **Box 1** – The identification of a possible significant error and/or omission will trigger the implementation of this procedure. Initial implementation of this procedure does not necessarily imply an error and/or omission has occurred nor does it indicate an imminent charge to the Consultant. This procedure is intended to protect both the Department and the Consultant should it be determined an error and/or omission has occurred.
- **Box 2** – The Engineering Project Manager will notify the Consultant Design Engineer and Bridge Engineer (if the problem is bridge related) of the problem. Notification of the Consultant Design Engineer and Bridge Engineer are <u>not</u> required prior to contacting the Consultant but is preferred in the case of non-time-critical issues. The Consultant Design Engineer will determine which Consultant Project Engineer within the Consultant Design Bureau will be handling the problem and advise the Engineering Project Manager. The Consultant Project Engineer will be the primary point of contact for the Engineering Project Manager. The Consultant Project Engineer will assist with the solution, as necessary, and aid in communication between the Department and the Consultant. The Engineering Project Manager or Consultant Project Engineer will contact the Consultant directly and discuss possible solutions. The Department is contractually obligated to give the Consultant an opportunity to be involved with the solution process. This provided opportunity must be documented. The Engineering Project Manager will keep the Consultant Project Engineer advised of the solution process.

- **Box 3** – The Consultant Design Engineer, in consultation with the Consultant Project Engineer, the Consultant, and with the aid of various members within the Department, will determine if the Consultant is responsible for the error and/or omission and whether they can be charged for the costs associated with the solution. The Consultant Project Engineer will notify the Engineering Project Manager of the determination. The Consultant Design Engineer will send a letter to the Consultant notifying them of the error and/or omission regardless of whether costs will be recovered from the Consultant. The letter is necessary to satisfy the contractual obligations between the Department and the Consultant.
- **Box 4** – There may be occasions when an error and/or omission exists but the Consultant cannot be charged. If the Consultant cannot be charged for the costs associated with a solution, the Engineering Project Manager will take corrective action to find a solution. The Engineering Project Manager will use available resources (which may include the Department and/or the Consultant) to find an appropriate solution. When requested by the Department, the Consultant will provide assistance to determine a solution.
- **Box 5** – When it is determined the Consultant is responsible for the costs associated with a solution, the Engineering Project Manager will begin tracking costs associated with the solution. This includes chargeable MDT time spent researching and implementing the solution and notifying the Contractor to keep a tally of costs directly attributed to the error and/or omission. The Consultant Project Engineer will begin charging time spent researching a solution and negotiating with the Consultant.
- **Box 6** - The Engineering Project Manager and the Consultant will work together to determine an acceptable solution. The Engineering Project Manager is encouraged to utilize the Consultant Project Engineer, as necessary, during the process. If the Engineering Project Manager encounters difficulty in dealing with the Consultant during any stage of the solution process, they should immediately contact the Consultant Project Engineer.
- **Box 7** - The Engineering Project Manager will write a change order, as necessary, and implement the solution.
- **Box 8** - The Engineering Project Manager will summarize and submit in writing the final field costs associated with the development and implementation of the solution to the Consultant Project Engineer within 60 days of implementing the solution.
- **Box 9** – The Consultant Project Engineer will compile all time and costs associated with the development and implementation of the solution. The Consultant Project Engineer will determine which costs are justified and consult with MDT Legal Services regarding the billing of the Consultant.
- **Box 10** - The Consultant Design Engineer will send a letter to the Consultant within 30 days of receiving the final field costs detailing the costs incurred with the solution and requesting payment from the Consultant. The letter will be carbon copied to MDT Legal Services, the District Administrator, the District Construction Engineer, and the Engineering Project Manager. The letter is necessary to satisfy the contractual obligations between the Department and the

Consultant.

- **Box 11** – The Engineering Project Manager will complete a Consultant Rating Form to identify the strengths and weaknesses of the Consultant during the solution process.

TSM:tjc:error_guidance_memo

Attachment

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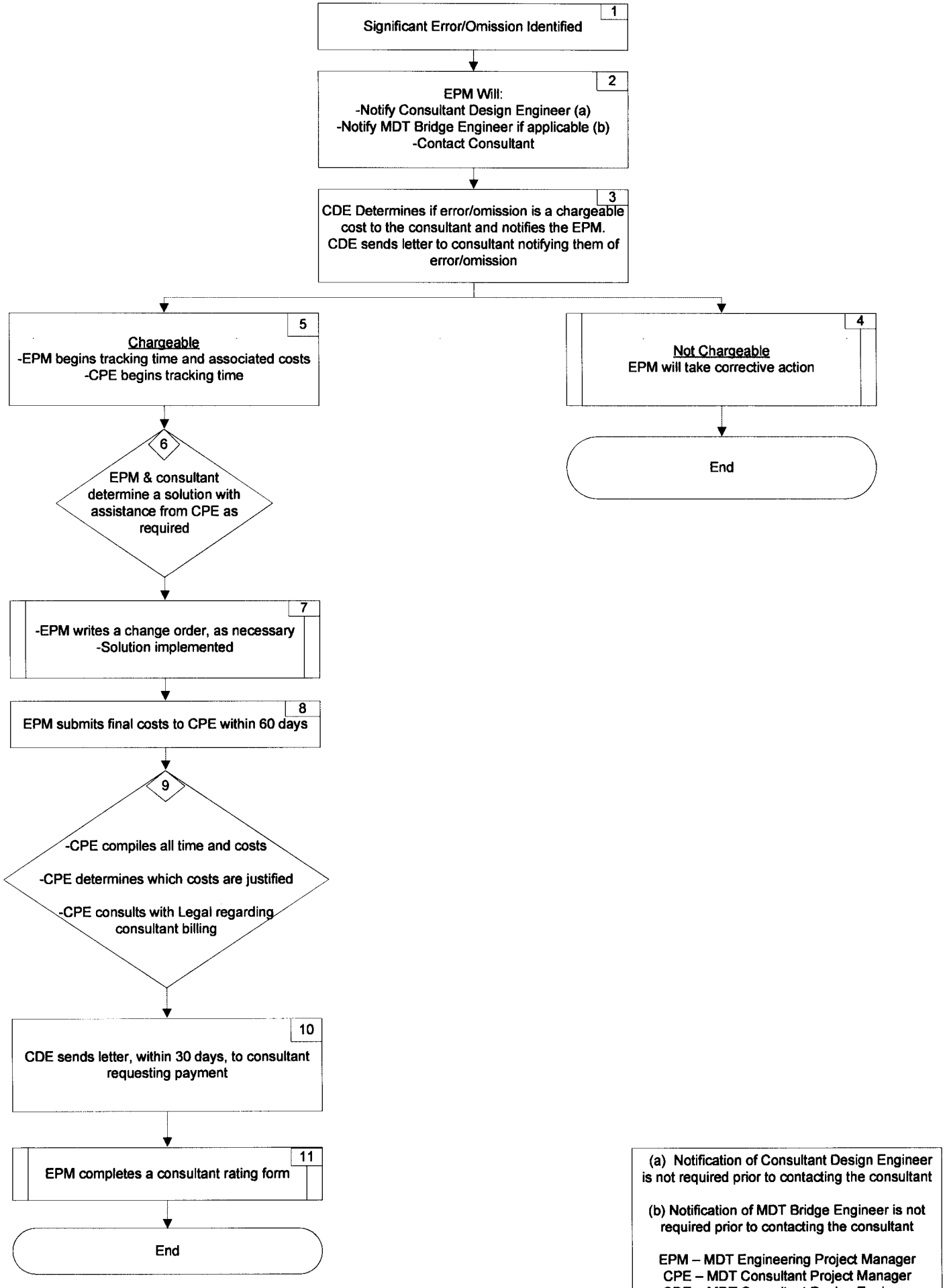
1
Significant Error/Omission Identified
2
EPM Will:
-Notify Consultant Design Engineer (a)
-Notify MDT Bridge Engineer if applicable (b)
-Contact Consultant
3
CDE Determines if error/omission is a chargeable cost to the consultant and notifies the EPM.
CDE sends letter to consultant notifying them of error/omission
5
Chargeable
-EPM begins tracking time and associated costs
-CPE begins tracking time
4
Not Chargeable
EPM will take corrective action
End
6
EPM & consultant determine a solution with assistance from CPE as required
7
-EPM writes a change order, as necessary
-Solution implemented
8
EPM submits final costs to CPE within 60 days
9
-CPE compiles all time and costs
-CPE determines which costs are justified
-CPE consults with Legal regarding consultant billing
10
CDE sends letter, within 30 days, to consultant requesting payment
11
EPM completes a consultant rating form
End
(a) Notification of Consultant Design Engineer is not required prior to contacting the consultant
(b) Notification of MDT Bridge Engineer is not required prior to contacting the consultant
EPM – MDT Engineering Project Manager
CPE – MDT Consultant Project Manager
CDE – MDT Consultant Design Engineer